

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A semiconductor device, comprising:
a silicon substrate; and
a gate dielectric film provided on the silicon substrate, the gate dielectric film includes at least a first oxide film and an oxynitride film formed on the first oxide film,
wherein a peak position of a concentration of nitrogen of the gate dielectric film is located in a range of 0.5 nm – 1.5 nm from a surface thereof, and in a range of 0.3 nm – 2.0 nm from an interface thereof with the silicon substrate, and an element concentration peak of the nitrogen is 7×10^{21} or greater.
2. (Original) The semiconductor device according to claim 1, further comprising a second oxide film formed on the oxynitride film, the peak position of the concentration of nitrogen of the gate dielectric film is located in a range of 0.3 nm – 2.0 nm from the interface with the silicon substrate, and the element concentration peak of the nitrogen is 7×10^{21} or greater.
- 3-8. (Canceled)
9. (Original) The semiconductor device according to claim 1, wherein the silicon substrate has been washed with hydrofluoric acid.
10. (Original) The semiconductor device according to claim 1, wherein the silicon substrate is planarized.
11. (Original) The semiconductor device according to claim 1, wherein the oxynitride film is formed from the group consisting of nitrogen monoxide gas, nitrogen dioxide gas and dinitrogen monoxide gas.
12. (Original) The semiconductor device according to claim 1, wherein a thickness of the oxynitride film is in a range of 0.3 nm – 1.5 nm.

13. (Original) The semiconductor device according to claim 1, wherein a thickness of the oxide film is in a range of 0.3 nm – 1.0 nm.

14-18. (Canceled)

19. (Currently amended) ~~The A semiconductor device according to claim 14 comprising:~~

a silicon substrate; and

means for reducing an amount of gate leakage, wherein a peak position of a concentration of nitrogen of the means for reducing an amount of gate leakage is located in a range of 0.5 nm – 1.5 nm from a surface thereof, and in a range of 0.3 nm – 2.0 nm from an interface thereof with the silicon substrate, and an element concentration peak of nitrogen is 7×10^{21} or greater,

wherein the means for reducing an amount of gate leakage includes an oxide film having a thickness in a range of 0.3 nm – 1.0 nm.

20. (Currently amended) ~~The A semiconductor device according to claim 14 comprising:~~

a silicon substrate; and

means for reducing an amount of gate leakage, wherein a peak position of a concentration of nitrogen of the means for reducing an amount of gate leakage is located in a range of 0.5 nm – 1.5 nm from a surface thereof, and in a range of 0.3 nm – 2.0 nm from an interface thereof with the silicon substrate, and an element concentration peak of nitrogen is 7×10^{21} or greater,

wherein the means for reducing an amount of gate leakage includes an oxynitride film having a thickness in a range of 0.3 nm – 1.5 nm.